

**SLOVENSKI STANDARD**  
**SIST EN 60603-4:2002****01-september-2002**

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**Connectors for frequencies below 3 MHz for use with printed boards - Part 4: Two-part connectors for printed boards having contacts spaced at 1,91 mm (0,075 in) centres and staggered terminations at that same spacing (IEC 60603-4:1987)**

Connectors for frequencies below 3 MHz for use with printed boards -- Part 4: Two-part connectors for printed boards having contacts spaced at 1,91 mm (0,075 in) centres and staggered terminations at that same spacing

Steckverbinder für gedruckte Schaltungen für Frequenzen unter 3 MHz -- Teil 4: Indirekte Steckverbinder für gedruckte Schaltungen mit 1,91 mm (0,075 in) Kontaktabstand und versetzten Anschlüssen im gleichen Abstand

[SIST EN 60603-4:2002](https://standards.iteh.ai/catalog/standards/sist/8e6bea0c-5513-4ada-afd3-320000000000/60603-4:2002)

Connecteurs pour fréquences inférieures à 3 MHz pour utilisation avec cartes imprimées -- Partie 4: Connecteurs enfichables à deux rangées pour cartes imprimées dont les contacts sont au pas de 1,91 mm (0,075 in) et les sorties décalées du même pas

**Ta slovenski standard je istoveten z: EN 60603-4:1998**

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**ICS:**

31.220.10 Xcã ã Á cã } ã Æ Æ [ ] ^ \ ç ì ã Plug-and-socket devices.  
Connectors

**SIST EN 60603-4:2002****en**

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EUROPEAN STANDARD

**EN 60603-4**

NORME EUROPÉENNE

EUROPÄISCHE NORM

February 1998

ICS 31.220.10

Descriptors: Electronic components, electric connectors, plug connectors, socket connectors, multi-contact connectors, designation, dimensions, assembling, couplings, connector plugs, bed plates, tests, standard gauges, characteristics

English version

**Connectors for frequencies below 3 MHz for use with printed boards  
Part 4: Two-part connectors for printed boards having contacts spaced  
at 1,91 mm (0,075 in) centres and staggered terminations at  
that same spacing  
(IEC 60603-4:1987)**

Connecteurs pour fréquences inférieures  
à 3 MHz pour utilisation avec cartes  
imprimées

Partie 4: Connecteurs enfichables à  
deux rangées pour cartes imprimées  
dont les contacts sont au pas de  
1,91 mm (0,075 in) et les sorties  
décalées du même pas  
(CEI 60603-4:1987)

Steckverbinder für gedruckte  
Schaltungen für Frequenzen unter  
3 MHz

Teil 4: Indirekte Steckverbinder für  
gedruckte Schaltungen mit  
1,91 mm (0,075 in) Kontaktabstand  
und versetzten Anschlüssen im  
gleichen Abstand  
(IEC 60603-4:1987)

This European Standard was approved by CENELEC on 1998-01-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

**CENELEC**

European Committee for Electrotechnical Standardization  
Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

### Foreword

The text of the International Standard IEC 60603-4:1987, prepared by SC 48B, Connectors, of IEC TC 48, Electromechanical components and mechanical structures for electronic equipment, was submitted to the formal vote and was approved by CENELEC as EN 60603-4 on 1998-01-01 without any modification.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 1998-12-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 1998-12-01

Annexes designated "normative" are part of the body of the standard.  
In this standard, annex ZA is normative.  
Annex ZA has been added by CENELEC.

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### Endorsement notice

The text of the International Standard IEC 60603-4:1987 was approved by CENELEC as a European Standard without any modification.

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**Annex ZA (normative)****Normative references to international publications  
with their corresponding European publications**

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE: When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60050(581)	1978	International Electrotechnical Vocabulary (IEV) Chapter 581: Electromechanical components for electronic equipment	-	-
IEC 60194	1975	Terms and definitions for printed circuits	HD 142 S2 <sup>1)</sup>	1977
IEC 60326	series	Printed boards	-	-
IEC 60512	series	Electromechanical components for electronic equipment - Basic testing procedures and measuring methods	EN 60512	series
IEC 60603-1	1981 <sup>2)</sup>	Connectors for frequencies below 3 MHz for use with printed boards Part 1: General rules and guide for the preparation of detail specifications	-	-

1) HD 142 S2 is superseded by HD 142 S3:1991, which is based on IEC 60194:1988.

2) IEC 60603-1:1991 + A1:1992 are harmonized as EN 60603-1:1998.

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NORME  
INTERNATIONALE  
INTERNATIONAL  
STANDARD

CEI  
IEC

603-4

Première édition  
First edition  
1987

**Connecteurs pour fréquences inférieures à 3 MHz  
pour utilisation avec cartes imprimées**

**Quatrième partie:**

Connecteurs enfichables à deux rangées

pour cartes imprimées dont les contacts sont  
au pas de 1,91 mm (0,075 in) et les sorties décalées  
du même pas

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<https://standards.iteh.ai/catalog/standards/sist/8e6bea0c-5513-4ada-afd3->

**Connectors for frequencies below 3 MHz  
for use with printed boards**

**Part 4:**

Two-part connectors for printed boards

having contacts spaced at 1.91 mm (0.075 in) centres  
and staggered terminations at that same spacing

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Commission Electrotechnique Internationale  
International Electrotechnical Commission  
Международная Электротехническая Комиссия

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## CONNECTORS FOR FREQUENCIES BELOW 3 MHz FOR USE WITH PRINTED BOARDS

### Part 4: Two-part connectors for printed boards having contacts spaced at 1.91 mm (0.075 in) centres and staggered terminations at that same spacing

## FOREWORD

- 1) The formal decisions or agreements of the IEC on technical matters, prepared by Technical Committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.
- 2) They have the form of recommendations for international use and they are accepted by the National Committees in that sense.
- 3) In order to promote international unification, the IEC expresses the wish that all National Committees should adopt the text of the IEC recommendation for their national rules in so far as national conditions will permit. Any divergence between the IEC recommendation and the corresponding national rules should, as far as possible, be clearly indicated in the latter.

## iTeh STANDARD PREVIEW

## PREFACE

This standard has been prepared by Sub-Committee 48B: Connectors, of IEC Technical Committee No. 48: Electromechanical Components for Electronic Equipment.

The text of this standard is based on the following documents:

Six Months' Rule	Report on Voting
48B(CO)132	48B(CO)149

Further information can be found in the Report on Voting indicated in the table above.

*The following IEC publication is quoted in this standard:*

Publication No. 512: Electromechanical Components for Electronic Equipment; Basic Testing Procedures and Measuring Methods.

*This standard shall be used in conjunction with the following IEC publications:*

Publications Nos. 50 (581) (1978): International Electrotechnical Vocabulary (IEV), Chapter 581: Electromechanical Components for Electronic Equipment.

194 (1975): Terms and Definitions for Printed Circuits.

326: Printed Boards.

603-1 (1981): Connectors for Frequencies below 3 MHz for Use with Printed Boards, Part 1: General Rules and Guide for the Preparation of Detail Specification.

## CONNECTORS FOR FREQUENCIES BELOW 3 MHz FOR USE WITH PRINTED BOARDS

### Part 4: Two-part connectors for printed boards having contacts spaced at 1.91 mm (0.075 in) centres and staggered terminations at that same spacing

#### 1. Scope

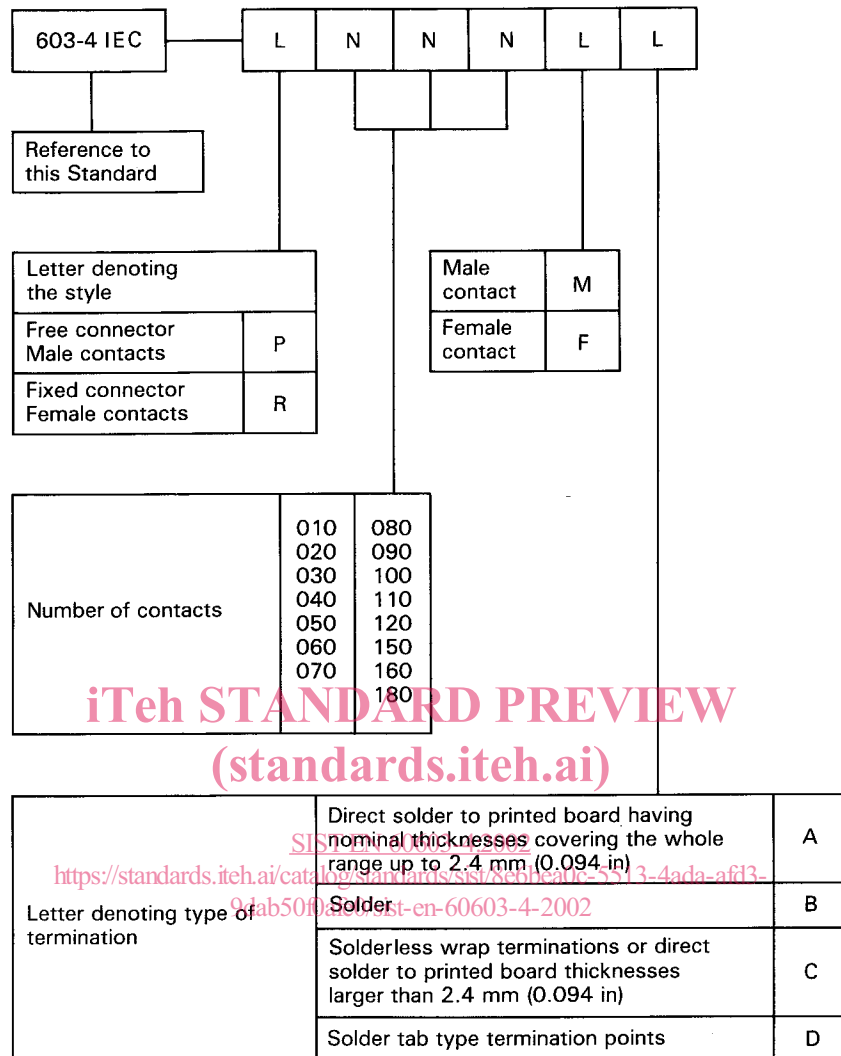
This standard applies to a group of related rectangular, multicontact, two-part printed board connectors with male and female contacts in conjunction with either solder or solderless terminations (such as wrap type). All connectors have the same contact spacing using the basic grid of 1.91 mm (0.075 in).

The free connectors feature a relatively new method for the attachment of the connector to the printed board. It is accomplished with a series of cantilever solder tabs, which are distributed evenly on both sides of the board. This new method was adopted to meet the following needs:

- a) direct replacement of a socket-connector by a two-piece mother and daughter board connector mated set, without requiring major design changes in the packaging system;
- b) easy access to both sides of a board without having to use plated-through holes;
- c) high density packaging, with components on both sides of the board, without the complication of staggered pins and termination pads.

## 2. IEC type designation

Connectors according to this standard shall be designated as follows :



Note. — “L” stands for letter.  
“N” stands for number.

365/86

### Examples :

603-4 IEC-P-050MA : 50 position free connector, male contacts, for solder to printed board of thickness less than or equal to 2.4 mm (0.094 in).

603-4 IEC-R-050FC : 50 position fixed connector, female contacts, for solderless wrap terminations or soldered to printed board of thicknesses larger than 2.4 mm (0.094 in).